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- 895 Differentiation of Muscle-Derived Cells into Myofibroblasts in Injured Skeletal Muscle  
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- 909 Therapeutic Effect of Angiostatin Gene Transfer in a Murine Model of Endometriosis  
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- 919 Innate Immune Responses to Cytomegalovirus Infection in the Developing Mouse Brain and Their Evasion by Virus-Infected Neurons  
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- 929 Blockade of Epidermal Growth Factor Receptor Signaling on Tumor Cells and Tumor-Associated Endothelial Cells for Therapy of Human Carcinomas  
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- 939 Differential Expression of Cysteine and Aspartic Proteases during Progression of Atherosclerosis in Apolipoprotein E-Deficient Mice  
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- 947 Tumor-Associated Macrophages Express Lymphatic Endothelial Growth Factors and Are Related to Peritumoral Lymphangiogenesis  
*Sebastian F. Schoppmann, Peter Birner, Johannes Stöckl, Romana Kalt, Robert Ullrich, Carola Caucig, Ernst Kriebuber, Katalin Nagy, Kari Alitalo, and Domscho Kerjaschki*
- 957 Genetic Imbalances in Progressed B-Cell Chronic Lymphocytic Leukemia and Transformed Large-Cell Lymphoma (Richter's Syndrome)  
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- 979 Abnormal Uterine Bleeding during Progesterin-Only Contraception May Result from Free Radical-Induced Alterations in Angiopoietin Expression  
*Graciela Krikun, Hilary Critchley, Frederick Schatz, Livia Wan, Rebeca Caze, Rebecca N. Baergen, and Charles J. Lockwood*
- 987 Hyperosmotic Stress Induces Nuclear Factor- $\kappa$ B Activation and Interleukin-8 Production in Human Intestinal Epithelial Cells  
*Zoltán H. Németh, Edwin A. Deitch, Csaba Szabó, and György Haskó*
- 997 Unique Patterns of Allelic Imbalance Distinguish Type 1 from Type 2 Sporadic Papillary Renal Cell Carcinoma  
*Melinda E. Sanders, Rosemarie Mick, John E. Tomaszewski, and Frederic G. Barr*
- 1007 Different Incidence and Pattern of *p15INK4b* and *p16INK4a* Promoter Region Hypermethylation in Hodgkin's and CD30-Positive Non-Hodgkin's Lymphomas  
*María J. García, Beatriz Martínez-Delgado, Arancha Cebrian, Ángel Martínez, Javier Benítez, and Carmen Rivas*
- 1015 Aberrant CpG Island Methylation of Multiple Genes in Intrahepatic Cholangiocarcinoma  
*Sam Lee, Woo Ho Kim, Hwoon-Yong Jung, Moon Ho Yang, and Gyeong Hoon Kang*
- 1023 Expression of  $\alpha$ 7 $\beta$ 1 Integrin Splicing Variants during Skeletal Muscle Regeneration  
*Minna Kääriäinen, Liisa Nissinen, Stephen Kaufman, Arnoud Sonnenberg, Markku Järvinen, Jyrki Heino, and Hannu Kalimo*
- 1033 Molecular Genetic Analysis of Placental Site Trophoblastic Tumors and Epithelioid Trophoblastic Tumors Confirms Their Trophoblastic Origin  
*Robert J. Oldt, III, Robert J. Kurman, and le-Ming Shib*



- 1039 Independent Regulation of Transforming Growth Factor- $\beta$ 1 Transcription and Translation by Glucose and Platelet-Derived Growth Factor

*Donald Fraser, Lalage Wakefield, and Aled Phillips*

- 1051 Multiple Head and Neck Tumors Frequently Originate from a Single Preneoplastic Lesion

*Maarten P. Tabor, Ruud H. Brakenhoff, Henrique J. Ruijter-Schippers, Jacqueline E. van der Wal, Gordon B. Snow, C. René Leemans, and Boudewijn J. M. Braakhuis*

- 1061 Reproductive Pathology and Sperm Physiology in Acid Sphingomyelinase-Deficient Mice

*Avigdor Butler, Xingxuan He, Ronald E. Gordon, Hai-Sban Wu, Shimon Gatt, and Eduard H. Schuchman*

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- 1077 Deletion of Decay-Accelerating Factor (CD55) Exacerbates Autoimmune Disease Development in MRL/lpr Mice

*Takasbi Miwa, Michael A. Maldonado, Lin Zhou, Xijun Sun, Hong Yuan Luo, Dewei Cai, Victoria P. Werth, Michael P. Madaio, Robert A. Eisenberg, and Wen-Cbao Song*

- 1087 Pathway Pathology: Histological Differences Between ErbB/Ras and Wnt Pathway Transgenic Mammary Tumors

*Andrea Rosner, Keiko Miyoshi, Esther Landesman-Bollag, Xin Xu, David C. Seldin, Amy R. Moser, Carol L. MacLeod, G. Shyamala, Amy E. Gillgrass, and Robert D. Cardiff*

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- 1101 Gut Mucosal Healing: Is the Science Relevant?

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- 1107 Molecular Regulation of Hepatocyte Generation in Adult Animals

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- 1111 p63 Coordinates Anogenital Modeling and Epithelial Cell Differentiation in the Developing Female Urogenital Tract

*Tan A. Ince, Aida P. Criko, Bradley J. Quade, Annie Yang, Frank D. McKeon, George L. Mutter, and Christopher P. Crum*

- 1119 Identification of Chromosome 9 Alterations and p53 Accumulation in Isolated Carcinoma *in Situ* of the Urinary Bladder versus Carcinoma *in Situ* Associated with Carcinoma

*Anton H. N. Hopman, Miriam A. F. Kamps, Ernst J. M. Speel, Rene F. M. Schapers, Guido Sauter, and Frans C. S. Ramaekers*

- 1127 Simian Virus 40 Sequences and Expression of the Viral Large T Antigen Oncoprotein in Human Pleomorphic Adenomas of Parotid Glands

*Marcella Martinelli, Fernanda Martini, Eliana Rinaldi, Laura Caramanico, Eros Magri, Enrico Grandi, Francesco Carinci, Antonio Pastore, and Mauro Tognon*

- 1135 Biochemical Analysis of  $\tau$  Proteins in Argrophilic Grain Disease, Alzheimer's Disease, and Pick's Disease: A Comparative Study

*Victoria Zbukareva, Keyur Shab, Kunibiro Uryu, Heiko Braak, Kelly Del Tredici, Sonali Sundarraj, Christopher Clark, John Q. Trojanowski, and Virginia M.-Y. Lee*

### **Technical Advance**

- 1143 Immunohistochemical Localization of Feline Immunodeficiency Virus Using Native Species Antibodies

*Arlin B. Rogers, Candace K. Mathiason, and Eduard A. Hoover*

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- 1153 Molecular Lymphatic Mapping of the Sentinel Lymph Node

*Bret Taback, Kaboko Hashimoto, Christine T. Kuo, Arden Chan, Armando E. Giuliano, and Dave S. B. Hoon*

- 1163 Genetic Changes in Neoplasms Arising in Congenital Melanocytic Nevi: Differences Between Nodular Proliferations and Melanomas  
*Boris C. Bastian, Jessie Xiong, Ilona J. Frieden, Mary L. Williams, Pauline Chou, Klaus Busam, Dan Pinkel, and Philip E. LeBolt*
- 1171 Differential Gene Expression Patterns in HER2/*neu*-Positive and -Negative Breast Cancer Cell Lines and Tissues  
*Katherine S. Wilson, Helen Roberts, Russell Leek, Adrian L. Harris, and Joseph Gerads*
- 1187 Heterogeneity of Ductular Reactions in Adult Rat and Human Liver Revealed by Novel Expression of Deleted in Malignant Brain Tumor 1  
*Hanne Cathrine Bisgaard, Uffe Holmskov, Eric Santoni-Rugiu, Peter Nagy, Ole Nielsen, Peter Ott, Ester Hage, Kim Dalhoff, Lene Juel Rasmussen, and Niels Tygstrup*
- 1199 Loss of p63 Expression Is Associated with Tumor Progression in Bladder Cancer  
*Marshall J. Urist, Charles J. Di Como, Ming-Lan Lu, Elizabeth Charytonowicz, David Verbel, Christopher P. Crum, Tan A. Ince, Frank D. McKeon, and Carlos Cordon-Cardo*
- 1207 Different Pattern of Allelic Loss in Epstein-Barr Virus-Positive Gastric Cancer with Emphasis on the p53 Tumor Suppressor Pathway  
*Bastiaan P. van Rees, Eric Caspers, Axel zur Hausen, Adriaan van den Brule, Paul Drillingburg, Marian A. J. Weterman, and G. Johan A. Offerhaus*
- 1215 CD24 Is Expressed in Ovarian Cancer and Is a New Independent Prognostic Marker of Patient Survival  
*Glen Kristiansen, Carsten Denkert, Karsten Schläuns, Edgar Dabl, Christian Pilarsky, and Steffen Hauptmann*
- 1223 Distinct and Complementary Information Provided by Use of Tissue and DNA Microarrays in the Study of Breast Tumor Markers  
*Christophe Glinestier, Emmanuelle Charafat-Jauffret, François Bertucci, François Elsingier, Jeannine Geneix, Didier Becblan, Nathalie Conte, José Adélaide, Yves Toiron, Catherine Nguyen, Patrice Viens, Marie-Joelle Mozziconacci, Rémi Houlgatte, Daniel Birnbaum, and Jocelyne Jacquemier*
- 1235 Angiogenesis and Vascular Architecture in Pheochromocytomas: Distinctive Traits in Malignant Tumors  
*Judith Favier, Pierre-François Plouin, Pierre Corvol, and Jean-Marie Gasc*
- 1247 Matrix Metalloproteinase-9 Contributes to Choroidal Neovascularization  
*Vincent Lambert, Carine Munaut, Maud Jost, Agnès Noël, Zena Werb, Jean-Michel Foidart, and Jean-Marie Rakic*
- 1255 Virus-Induced Demyelination in Nude Mice Is Mediated by  $\gamma\delta$  T Cells  
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- 1265 Treatment with an Antibody to VLA-1 Integrin Reduces Glomerular and Tubulointerstitial Scarring in a Rat Model of Crescentic Glomerulonephritis  
*H. Terence Cook, Sarah B. Khan, Andrew Allen, Gurjeet Bhangal, Jennifer Smith, Roy R. Lobb, and Charles D. Pusey*
- 1273 Senescence Marker Protein-30 Knockout Mouse Liver Is Highly Susceptible to Tumor Necrosis Factor- $\alpha$ - and Fas-Mediated Apoptosis  
*Akihito Ishigami, Toshiko Fujita, Setsuko Handa, Takuji Shirasawa, Harubiko Koseki, Tsuneo Kitamura, Nobuyuki Enomoto, Nobubiro Sato, Tatsuo Shimozawa, and Naoki Maruyama*
- 1283 Interleukin-13 Fusion Cytotoxin Arrests *Schistosoma mansoni* Egg-Induced Pulmonary Granuloma Formation in Mice  
*Claudia Jakubczik, Steven L. Kunkel, Bharat H. Joshi, Raj K. Puri, and Cory M. Hogaboam*
- 1299 Independent Genetic Events Associated with the Development of Multiple Parathyroid Tumors in Patients with Primary Hyperparathyroidism  
*Trisha Dwight, Anne E. Nelson, George Theodosopoulos, Anne Louise Richardson, Diana L. Learoyd, Jeanette Philips, Leigh Delbridge, Jan Zedenius, Bin T. Teh, Catbarina Larsson, Deborah J. Marsh, and Bruce G. Robinson*
- 1307 The Role of MIG/CXCL9 in Cardiac Allograft Vasculopathy  
*James J. Yun, Michael P. Fischbein, David Whiting, Yoshibito Irie, Michael C. Fishbein, Marie D. Burdick, John Belperio, Robert M. Strieter, Hillel Laks, Judith A. Berliner, and Abbas Ardehali*

- 1315 Large Scale Molecular Analysis Identifies Genes with Altered Expression in Salivary Adenoid Cystic Carcinoma  
*Henry F. Frierson, Jr., Adel K. El-Naggar, John B. Welsb, Lisa M. Sapinoso, Andrew I. Su, Jun Cheng, Takashi Saku, Christopher A. Moskaluk, and Garret M. Hampton*
- 1325 Parathyroid Hormone Receptor Type 1/Indian Hedgehog Expression Is Preserved in the Growth Plate of Human Fetuses Affected with Fibroblast Growth Factor Receptor Type 3 Activating Mutations  
*Sarah Cormier, Anne-Lise Delezoide, Catherine Benoist-Lasselin, Laurence Legeai-Mallet, Jacky Bonaventure, and Caroline Silve*
- 1337 Direct Evidence for Interferon- $\gamma$  Production by Effector-Memory-Type Intraepidermal T Cells Residing at an Effector Site of Immunopathology in Fixed Drug Eruption  
*Yoshiko Mizukawa, Yoshimi Yamazaki, Yuichi Teraki, Jun Hayakawa, Kazubito Hayakawa, Hideko Nuriya, Michinori Kobara, and Tetsuo Sbiobara*
- 1349 DNA Polymerase  $\mu$  Gene Expression in B-Cell Non-Hodgkin's Lymphomas: An Analysis Utilizing *in Situ* Hybridization  
*April Chiu, Langxing Pan, Zongdong Li, Scott Ely, Amy Chadburn, and Daniel M. Knowles*
- 1357 Caveolin-1 Mutations (P132L and Null) and the Pathogenesis of Breast Cancer: Caveolin-1 (P132L) Behaves in a Dominant-Negative Manner and Caveolin-1 (-/-) Null Mice Show Mammary Epithelial Cell Hyperplasia  
*Hyangkyu Lee, David S. Park, Babak Razani, Robert G. Russell, Richard G. Pestell, and Michael P. Lisanti*
- 1371 Human Cytomegalovirus-Caused Damage to Placental Trophoblasts Mediated by Immediate-Early Gene-Induced Tumor Necrosis Factor- $\alpha$   
*Gary Chan, Denise G. Hemmings, Andrew D. Yurochko, and Larry J. Guilbert*
- 1383 Normal Remodeling of the Oxygen-Injured Lung Requires the Cyclin-Dependent Kinase Inhibitor p21<sup>Cip1/WAF1/Sdi1</sup>  
*Rbonda J. Slaversky, Richard H. Watkins, Terry W. Wright, Eric Hernady, Michael B. LoMonaco, Carl T. D'Angio, Jacqueline P. Williams, William M. Mascalco, and Michael A. O'Reilly*
- 1395 Blockade of Platelet-Derived Growth Factor or Its Receptors Transiently Delays but Does Not Prevent Fibrous Cap Formation in ApoE Null Mice  
*Koichi Kozaki, Wolfgang E. Kaminski, Jingjing Tang, Stan Hollenbach, Per Lindahl, Carol Sullivan, Jin-Chen Yu, Keith Abe, Paul J. Martin, Russell Ross, Christer Betsbolz, Neill A. Giese, and Elaine W. Raines*
- 1409 Nitric Oxide Donors Suppress Chemokine Production by Keratinocytes *in Vitro* and *in Vivo*  
*Maria Laura Giustizieri, Cristina Albanesi, Claudia Scarponi, Ornella De Pittà, and Giampiero Girolimoni*
- 1419 Osteoprotegerin Reduces Osteoclast Numbers and Prevents Bone Erosion in Collagen-Induced Arthritis  
*Evan Romas, Natalie A. Sims, Daphne K. Hards, Mandy Lindsay, Julian W.M. Quinn, Peter F.J. Ryan, Colin R. Dunstan, T. John Martin, and Matthew T. Gillespie*
- 1429 Matrix Metalloproteinase-9-Dependent Exposure of a Cryptic Migratory Control Site in Collagen is Required before Retinal Angiogenesis  
*Masanori Hangai, Noribiko Kitaya, Jingsong Xu, Candy K. Chan, Jenny J. Kim, Zena Werb, Stephen J. Ryan, and Peter C. Brooks*
- 1439 Strain Background Alters Mammary Gland Lesion Phenotype in Transforming Growth Factor- $\alpha$  Transgenic Mice  
*Teresa A. Rose-Hellekant, Kennedy Gilchrist, and Eric P. Sandgren*
- 1449 Esophageal Ulceration Triggers Expression of Hypoxia-Inducible Factor-1 $\alpha$  and Activates Vascular Endothelial Growth Factor Gene: Implications for Angiogenesis and Ulcer Healing  
*Dolgor Baatar, Michael K. Jones, Koji Tsugawa, Rama Pai, Woo S. Moon, Gou Y. Kob, Injune Kim, Seigo Kitano, and Andrzej S. Tarnawski*
- 1459 Co-Localization of Nephlin, Podocin, and the Actin Cytoskeleton: Evidence for a Role in Podocyte Foot Process Formation  
*Moin A. Saleem, Lan Ni, Ian Witherden, Karl Tryggvason, Vesa Ruotsalainen, Peter Mundel, and Peter W. Mathieson*
- 1467 Heterogeneous Expression and Functions of Androgen Receptor Co-Factors in Primary Prostate Cancer  
*Peng Li, Xin Yu, Kai Ge, Jonathan Melamed, Robert G. Roeder, and Zhengxin Wang*

- 1475 Lipopolysaccharide Induces Overexpression of MUC2 and MUC5AC in Cultured Biliary Epithelial Cells: Possible Key Phenomenon of Hepatolithiasis  
*Yob Zen, Kenichi Harada, Motoko Sasaki, Koichi Tsuneyama, Kazuyoshi Katayanagi, Yui Yamamoto, and Yasumi Nakanuma*
- 1485 Interferon- $\gamma$  Augments CD95(APO-1/Fas) and Pro-Caspase-8 Expression and Sensitizes Human Vascular Endothelial Cells to CD95-Mediated Apoptosis  
*Jie Hui Li, Martin S. Kluger, Lisa A. Madge, Lian Zbeng, Alfred L. M. Botwell, and Jordan S. Pober*
- 1497 Nuclear Factor- $\kappa$ B Inhibitors as Potential Novel Anti-Inflammatory Agents for the Treatment of Immune Glomerulonephritis  
*Oscar López-Franco, Yusuke Suzuki, Guillermo Sanjuán, Julia Blanco, Purificación Hernández-Vargas, Yoshikage Yo, Jeffrey Kopp, Jesús Egido, and Carmen Gómez-Guerrero*
- 1507 Chromosome 6 Suffers Frequent and Multiple Aberrations in Thymoma  
*Masayoshi Inoue, Alexander Marx, Andreas Zettl, Philipp Ströbel, Hans-Konrad Müller-Hermelink, and Petr Starostik*

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- 1515 Progressive Age-Related Changes Similar to Age-Related Macular Degeneration in a Transgenic Mouse Model  
*Piroska Elizabeth Rakoczy, Dan Zhang, Terry Robertson, Nigel L. Barnett, John Papadimitriou, Ian Jeffrey Constable, and Chooi-May Lai*

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- 1527 First Steps in Unraveling the Genotype of Enteropathy-Type T-Cell Lymphoma  
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- 1531 Gene Expression Studies on Soft Tissue Tumors  
*Matt van de Rijn and Brian P. Rubin*

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- 1535 ADAM12 Alleviates the Skeletal Muscle Pathology in *mdx* Dystrophic Mice  
*Paulina Krongvist, Nobuko Kawaguchi, Reidar Albrechtsen, Xiufeng Xu, Henrik Daa Schrøder, Behzad Moghadaszadeh, Finn Cilius Nielsen, Camilla Fröblich, Eva Engvall, and Ulla M. Wewer*
- 1541 Telomere Shortening Is Nearly Universal in Pancreatic Intraepithelial Neoplasia  
*N. Tjarda van Heek, Alan K. Meeker, Scott E. Kern, Charles J. Yeo, Keith D. Lillemoe, John L. Cameron, G. Joban A. Offerhaus, Jessica L. Hicks, Robb E. Wilentz, Michael G. Goggins, Angelo M. De Marzo, Ralph H. Hruban, and Anirban Maitra*
- 1549 Genome-Wide Appraisal of Thyroid Cancer Progression  
*Volker B. Wreesmann, Ronald A. Gbossein, Snehal G. Patel, Charles P. Harris, Erik A. Schnaser, Asbok R. Shaba, R. Michael Tuttle, Jatin P. Sbab, Pulivarthi H. Rao, and Bbuvanesb Singh*

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- 1557 Software Tools for High-Throughput Analysis and Archiving of Immunohistochemistry Staining Data Obtained with Tissue Microarrays  
*Cbib Long Liu, Wijan Prapong, Yasodba Natkunam, Asb Alizadeh, Kelli Montgomery, C. Blake Gilks, and Matt van de Rijn*
- 1567 Isolation of Living Neurons from Human Elderly Brains Using the Immunomagnetic Sorting DNA-Linker System  
*Yoshibiro Konishi, Kristina Lindholm, Li-Bang Yang, Rena Li, and Yong Shen*

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- 1577 **A Role for Caspase-1 and -3 in the Pathology of Experimental Allergic Encephalomyelitis: Inflammation Versus Degeneration**  
*Zubair Ahmed, Anne I. Doward, Gareth Pryce, Deanna L. Taylor, Jennifer M. Pocock, John P. Leonard, David Baker, and M. Louise Cuzner*
- 1587 **Expression Profiling of Synovial Sarcoma by cDNA Microarrays: Association of *ERBB2*, *IGFBP2*, and *ELF3* with Epithelial Differentiation**  
*Susanne V. Allander, Peter B. Illei, Yidong Chen, Cristina R. Antonescu, Mike Bittner, Marc Ladanyi, and Paul S. Meltzer*
- 1597 **Up-Regulation of Connexin43 in Glomerular Podocytes in Response to Injury**  
*Eishin Yaoita, Jian Yao, Yutaka Yoshida, Tetsuo Morioka, Masaaki Nameta, Takuma Takata, Jun-ichi Kamiie, Hidebiko Fujinaka, Takashi Oite, and Tadasbi Yamamoto*
- 1607 **Intercellular Adhesion Molecule-1 and L-Selectin Regulate Bleomycin-Induced Lung Fibrosis**  
*Yasubito Hamaguchi, Yoriko Nishizawa, Masahide Yasui, Minoru Hasegawa, Yuko Kaburagi, Kazubiro Komura, Tetsuya Nagaoaka, Eriko Saito, Yuka Shimada, Kazubiko Takebara, Takafumi Kadono, Douglas A. Steeber, Thomas F. Tedder, and Shinichi Sato*
- 1619 **Proliferation, but Not Apoptosis, Is Associated with Distinct  $\beta$ -Catenin Expression Patterns in Non-Small-Cell Lung Carcinomas: Relationship with Adenomatous Polyposis Coli and G<sub>1</sub>- to S-Phase Cell-Cycle Regulators**  
*Athanassios Kotsinas, Konstantinos Evangelou, Panayotis Zacharatos, Christos Kittas, and Vassilis G. Gorgoulis*
- 1635 **Chromosomal Gains at 9q Characterize Enteropathy-Type T-Cell Lymphoma**  
*Andreas Zettl, German Ott, Angela Makulik, Tiemo Katzenberger, Petr Starostik, Thorsten Eichler, Bernhard Puppe, Martin Bentz, Hans Konrad Müller-Hermelink, and Andreas Chott*
- 1647 **Up-Regulated Caveolin-1 Accentuates the Metastasis Capability of Lung Adenocarcinoma by Inducing Filopodia Formation**  
*Chao-Chi Ho, Pei-Hsin Huang, Hsin-Yi Huang, Yen-Ho Chen, Pan-Chyr Yang, and Su-Ming Hsu*
- 1657 **Expression and Regulation of CD97 in Colorectal Carcinoma Cell Lines and Tumor Tissues**  
*Matthias Steinert, Manja Wobus, Carsten Boltze, Alexander Schütz, Mandy Wablubl, Jörg Hamann, and Gabriela Aust*
- 1669 **Constitutive Retinal CD200 Expression Regulates Resident Microglia and Activation State of Inflammatory Cells during Experimental Autoimmune Uveoretinitis**  
*Catbryn Broderick, Robert M. Hoek, John V. Forrester, Janet Liversidge, Jonathon D. Sedgwick, and Andrew D. Dick*
- 1679 **Immunosuppressive Treatment Protects Against Angiotensin II-Induced Renal Damage**  
*Dominik N. Müller, Erdenechimeg Shagdarsuren, Joon-Keun Park, Ralf Dechend, Eero Mervaala, Franziska Hampich, Anette Fiebeler, Xinsong Ju, Piet Finckenberg, Jürgen Theuer, Christiane Viedt, Joerg Kreuzer, Harald Heidecke, Hermann Haller, Martin Zenke, and Friedrich C. Luft*
- 1695 **Differentiation between High- and Low-Grade Astrocytoma Using a Human Recombinant Antibody to the Extra Domain-B of Fibronectin**  
*Patrizia Castellani, Laura Borsi, Barbara Carnemolla, Attila Birö, Alessandra Dorcaratto, Giuseppe L. Viale, Dario Neri, and Luciano Zardi*
- 1701 **Involvement of the Mural Thrombus as a Site of Protease Release and Activation in Human Aortic Aneurysms**  
*Vincent Fontaine, Marie-Paule Jacob, Xavier Houard, Patrick Rossignol, Didier Plissonnier, Eduardo Angles-Cano, and Jean-Baptiste Michel*
- 1711 **tau Assembly in Inducible Transfectants Expressing Wild-Type or FTDP-17 tau**  
*Michael DeTure, Li-wen Ko, Colin Easson, and Shu-Hui Yen*
- 1723 ***Smad4* Overexpression Causes Germ Cell Ablation and Leydig Cell Hyperplasia in Transgenic Mice**  
*Anita Narula, Signe Kilen, Eva Ma, Jessica Kroeger, Erwin Goldberg, and Teresa K. Woodruff*
- 1735 **Sporadic Fundic Gland Polyps with Epithelial Dysplasia: Evidence for Preferential Targeting for Mutations in the Adenomatous Polyposis Coli Gene**  
*Susan C. Abraham, Seun Ja Park, Lilian Mugartegui, Stanley R. Hamilton, and Tsung-Teb Wu*



- 1743 Changes in Differential Gene Expression because of Warm Ischemia Time of Radical Prostatectomy Specimens  
*Atreya Dasb, Ira P. Maine, Sooryananayana Varambally, Ronglai Shen, Arul M. Chinnatyan, and Mark A. Rubin*
- 1749 Guanylate-Binding Protein-1 Expression Is Selectively Induced by Inflammatory Cytokines and Is an Activation Marker of Endothelial Cells during Inflammatory Diseases  
*Clara Lubeseder-Martellato, Eric Guenzi, Anita Jörg, Kristin Töpol, Elisabeth Naschberger, Elisabeth Kremmer, Christian Zietz, Erwin Tschachler, Peter Hutzler, Martin Schwemmler, Katrin Matzen, Thomas Grimm, Barbara Ensoli, and Michael Stürzl*
- 1761 Gene Transfer of Human Hepatocyte Growth Factor into Rat Skin Wounds Mediated by Liposomes Coated with the Sendai Virus (Hemagglutinating Virus of Japan)  
*Kuniaki Nakanishi, Maki Uenoyama, Nariya Tomita, Ryuichi Morishita, Yasufumi Kaneda, Toshio Ogibara, Kunio Matsumoto, Toshikazu Nakamura, Akie Maruta, Shigeo Matsuyama, Toshiaki Kawai, Takashi Aures, Takuya Hayashi, and Tomosumi Ikeda*
- 1773 Aldosterone-Induced Inflammation in the Rat Heart: Role of Oxidative Stress  
*Yao Sun, Jiakun Zhang, Li Lu, Sue S. Chen, Mark T. Quinn, and Karl T. Weber*
- 1783 Fas and Fas Ligand Are Up-Regulated in Pulmonary Edema Fluid and Lung Tissue of Patients with Acute Lung Injury and the Acute Respiratory Distress Syndrome  
*Kurt H. Albertine, Matthew F. Soulier, Zhengming Wang, Akitoshi Isbizaka, Satoru Hashimoto, Guy A. Zimmerman, Michael A. Matthay, and Lorraine B. Ware*
- 1797 Specific Role of Interleukin-1 in Hepatic Neutrophil Recruitment after Ischemia/Reperfusion  
*Atsushi Kato, Cem Gabay, Tomobisa Okaya, and Alex B. Lentsch*
- 1805 Aging Accelerates Endotoxin-Induced Thrombosis: Increased Responses of Plasminogen Activator Inhibitor-1 and Lipopolysaccharide Signaling with Aging  
*Koji Yamamoto, Takayoshi Shimokawa, Hong Yi, Ken-ichi Isobe, Tetsuhiro Kojima, David J. Loskutoff, and Hidehiko Saito*
- 1815 Trapping of Misdirected Dendritic Cells in the Granulomatous Lesions of Giant Cell Arteritis  
*Wei Ma Krupa, Misba Dewan, Myung-Sbin Jeon, Paul J. Kurtin, Brian R. Younge, Jörg J. Goronzy, and Cornelia M. Weyand*
- 1825 Identification of Genes Involved in Resistance to Interferon- $\alpha$  in Cutaneous T-Cell Lymphoma  
*Lorraine Tracey, Raquel Villuendas, Pablo Ortiz, Ana Dopazo, Inmaculada Spiteri, Luis Lombardía, Jose L. Rodríguez-Peralto, Jesús Fernández-Herrera, Almudena Hernández, Javier Fraga, Orlando Domínguez, Javier Herrero, Miguel A. Alonso, Joaquín Dopazo, and Miguel A. Piris*
- 1839 Role of Changes in Tissue Nucleotides on the Development of Apoptosis during Ischemia/Reperfusion in Rat Small Bowel  
*Merixell Genescà, Anna Sola, Rosa Miquel, Felip Pi, Carme Xaus, Vicente Alfaro, and Georgina Hotter*
- 1849 Generation of C5a by Phagocytic Cells  
*Markus Huber-Lang, Ellen M. Younkin, J. Vidya Sarma, Niels Riedemann, Stephanie R. McGuire, Kristina T. Lu, Robin Kunkel, John G. Younger, Firas S. Zetouni, and Peter A. Ward*
- 1861 Comparative Genomic Hybridization Pattern Distinguishes T-Cell/Histiocyte-Rich B-Cell Lymphoma from Nodular Lymphocyte Predominance Hodgkin's Lymphoma  
*Sabine Franke, Ivona Wlodarska, Brigitte Maes, Peter Vandenberghe, Ruth Achten, Anne Hagemeyer, and Chris De Wolf-Peters*
- 1869 Intraneuronal Alzheimer A $\beta$ 42 Accumulates in Multivesicular Bodies and Is Associated with Synaptic Pathology  
*Reisuke H. Takahashi, Teresa A. Mihner, Feng Li, Ellen E. Nam, Mark A. Edgar, Haruyasu Yamaguchi, M. Flint Beal, Huaxi Xu, Paul Greengard, and Gunnar K. Gouras*
- 1881 Differential Expression of the Epithelial-Mesenchymal Transition Regulators Snail, SIP1, and Twist in Gastric Cancer  
*Erika Rosivatz, Ingrid Becker, Katja Specht, Elena Fricke, Birgit Lubert, Raymonde Busch, Heinz Höfler, and Karl-Friedrich Becker*
- 1893 Heparin Inhibits Phosphorylation and Autonomous Activity of Ca<sup>2+</sup>/Calmodulin-Dependent Protein Kinase II in Vascular Smooth Muscle Cells  
*Ketu Mishra-Gorur, Harold A. Singer, and John J. Castellot, Jr*

- 1903 Induction of Intestinal Inflammation in Mouse by Activation of Proteinase-Activated Receptor-2  
*Nicolas Cenac, Anne-Marie Coelbo, Catby Nguyen, Steven Compton, Patricia Andrade-Gordon, Wallace K. MacNaughton, John L. Wallace, Morley D. Hollenberg, Nigel W. Bunnett, Rafael Garcia-Villar, Lionel Bueno, and Nathalie Vergnolle*
- 1917 Vascular Endothelial Growth Factor Immunoneutralization Plus Paclitaxel Markedly Reduces Tumor Burden and Ascites in Athymic Mouse Model of Ovarian Cancer  
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### **Animal Models**

- 1925 An Ethyl-Nitrosourea-Induced Point Mutation in *Phex* Causes Exon Skipping, X-Linked Hypophosphatemia, and Rickets  
*Marina R. Carpinelli, Ian P. Wicks, Natalie A. Sims, Kristy O'Donnell, Katherine Hanzinikolas, Rachel Burt, Simon J. Foote, Melanie Bablo, Warren S. Alexander, and Douglas J. Hilton*
- 1935 Evidence for Early Cytotoxic Aggregates in Transgenic Mice for Human Transthyretin Leu55Pro  
*Mónica Mendes Sousa, Rui Fernandes, Joana Almeida Palha, Ana Taboada, Paulo Vieira, and Maria João Saraiva*

### **Meeting Report**

- 1949 New Approaches to the Biology of Melanoma: A Workshop of the National Institutes of Health Pathology B Study Section  
*Meenhard Herlyn, Martin Padarathsingh, Lynda Chin, Mary Hendrix, Dorothea Becker, Mark Nelson, Yves DeClerck, James McCarthy, and Suresh Mobla*

### **December 2002**

- 1959 **This Month in AJP**

### **Review**

- 1961 Effect of Fixatives and Tissue Processing on the Content and Integrity of Nucleic Acids  
*Mythily Srinivasan, Daniel Sedmak, and Scott Jewell*

### **Commentary**

- 1973 Genes Involved in Breast Cancer Progression: Analysis of Global Changes in Gene Expression or Retroviral Tagging?  
*Emmett V. Schmidt*

### **Short Communications**

- 1979 Disease-Associated Prion Protein in Vessel Walls  
*Oskar Koperek, Gábor G. Kovács, Diane Ritchie, James W. Ironside, Herbert Budka, and Georg Wick*
- 1985 Lens Defects and Age-Related Fiber Cell Degeneration in a Mouse Model of Increased A $\beta$ PP Gene Dosage in Down Syndrome  
*Peter H. Frederikse and Xiao-Ou Ren*
- 1991 Expression of Cytokeratins 17 and 5 Identifies a Group of Breast Carcinomas with Poor Clinical Outcome  
*Matt van de Rijn, Charles M. Perou, Rob Tibshirani, Phillippe Haas, Olli Kallioniemi, Juba Kononen, Joachim Torborst, Guido Sauter, Markus Zuber, Ossi R. Kõchli, Frank Mross, Holger Dieterich, Rob Seitz, Doug Ross, David Boistein, and Pat Brown*
- 1997 Craniopharyngiomas of Adamantinomatous Type Harbor  $\beta$ -Catenin Gene Mutations  
*Shigeki Sekine, Tatsuhiro Shibata, Akiko Kokubu, Yukio Morisbita, Masayuki Noguchi, Yukibiro Nakanishi, Michie Sakamoto, and Setsuo Hirohashi*

### **Regular Articles**

- 2003 Increased Carbon Tetrachloride-Induced Liver Injury and Fibrosis in FGFR4-Deficient Mice  
*Chundong Yu, Fen Wang, Chengliu Jin, Xiaobong Wu, Wai-kin Chan, and Wallace L. McKeehan*

- 2011 Differential Expression of LIGHT and Its Receptors in Human Placental Villi and Amniochorion Membranes  
*Ryan M. Gill, Jian Ni, and Joan S. Hunt*
- 2019 Bile Acid-Induced Mallory Body Formation in Drug-Primed Mouse Liver  
*Peter Fickert, Michael Trauner, Andrea Fuchsichler, Conny Stumptner, Kurt Zatloukal, and Helmut Denk*
- 2027 The Molecular Basis for Hereditary Porcine Membranoproliferative Glomerulonephritis Type II: Point Mutations in the Factor H Coding Sequence Block Protein Secretion  
*Guido A. Hegasy, Tamara Manuelian, Kolbjorn Hogasen, Joban H. Jansen, and Peter F. Zipfel*
- 2035 Osteopontin Inhibits Mineral Deposition and Promotes Regression of Ectopic Calcification  
*Susan A. Steitz, Mei Y. Speer, Marc D. McKee, Lucy Liau, Manuela Almeida, Hsueh Yang, and Cecilia M. Giachelli*
- 2047 Cathepsin-L, a Key Molecule in the Pathogenesis of Drug-Induced and I-Cell Disease-Mediated Gingival Overgrowth: A Study with Cathepsin-L-Deficient Mice  
*Fusanori Nishimura, Hisa Naruishi, Koji Naruishi, Teruo Yamada, Junzo Sasaki, Christoph Peters, Yasuo Uchiyama, and Yoji Murayama*
- 2053 Anti-Thrombin Is Expressed in the Benign Prostatic Epithelium and in Prostate Cancer and Is Capable of Forming Complexes with Prostate-Specific Antigen and Human Glandular Kallikrein 2  
*Yue Cao, Åke Lundwall, Virgil Gadaleanu, Hans Lilja, and Anders Bjartell*
- 2065 Loss of the EP<sub>2</sub> Prostaglandin E<sub>2</sub> Receptor in Immortalized Human Keratinocytes Results in Increased Invasiveness and Decreased Paxillin Expression  
*Raymond L. Konger, Glynis A. Scott, Yvonne Landt, Jack H. Ladenson, and Alice P. Pentland*
- 2079 Acute Generalized Exanthematous Pustulosis: Role of Cytotoxic T Cells in Pustule Formation  
*Simone Schmid, Petra C. Kuechler, Markus Britschgi, Urs C. Steiner, Nikhil Yawalkar, Alain Limat, Kurt Baltensperger, Lasse Braatben, and Werner J. Pichler*
- 2087 Cytoplasmic Aggregates of Phosphorylated Extracellular Signal-Regulated Protein Kinases in Lewy Body Diseases  
*Jian-Hui Zhu, Scott M. Kulich, Tim D. Oury, and Charleen T. Chu*
- 2099 Sustained Expression of Homeobox D10 Inhibits Angiogenesis  
*Connie Myers, Aubri Charboneau, Irene Cheung, Douglas Hanks, and Nancy Boudreau*
- 2111 Serotonin Mechanisms in Heart Valve Disease I: Serotonin-Induced Up-Regulation of Transforming Growth Factor- $\beta$ 1 via G-Protein Signal Transduction in Aortic Valve Interstitial Cells  
*Bo Jian, Jie Xu, Jeanne Connolly, Rasbmin C. Savani, Navneet Narula, Bruce Liang, and Robert J. Levy*
- 2123 Frequent Deletion of Fas Gene Sequences Encoding Death and Transmembrane Domains in Nasal Natural Killer/T-Cell Lymphoma  
*Lijun Shen, Anthony C. T. Liang, Liwei Lu, Wing Yan Au, Yok-Lam Kwong, Raymond H. S. Liang, and Gopesh Srivastava*
- 2133 Genomic Imbalances in Pediatric Intracranial Ependymomas Define Clinically Relevant Groups  
*Sara Dyer, Emma Prebble, Val Davison, Paul Davies, Pramila Ramani, David Ellison, and Richard Grundy*
- 2143 Bacterial Colonization and the Expression of Inducible Nitric Oxide Synthase in Murine Wounds  
*Eric Maboney, Jonathan Reichner, Leslie Robinson Bostom, Balduino Mastrofrancesco, William Henry, and Jorge Albina*
- 2153 Nipah Virus Infection: Pathology and Pathogenesis of an Emerging Paramyxoviral Zoonosis  
*Kum Thong Wong, Wun-Ju Sieb, Shalini Kumar, Karim Norain, Wabidab Abdullah, Jeannette Guarner, Cynthia S. Goldsmith, Kaw Bing Chua, Sai Kit Lam, Chong Tin Tan, Khean Jin Gob, Heng Thay Chong, Rani Jusob, Pierre E. Rollin, Thomas G. Ksiazek, Sherif R. Zaki, and the Nipah Virus Pathology Working Group*
- 2169 Targeted Inactivation of the Mouse Guanylin Gene Results in Altered Dynamics of Colonic Epithelial Proliferation  
*Kris A. Steinbrecher, Steve A. Wouk, Jeffrey A. Rudolph, David P. Witte, and Mitchell B. Cohen*

- 2179 Transforming Growth Factor- $\beta$ 1 Is Up-Regulated by Podocytes in Response to Excess Intraglomerular Passage of Proteins: A Central Pathway in Progressive Glomerulosclerosis  
*Mauro Abbate, Carla Zoja, Marina Morigi, Daniela Rottoli, Stefania Angioletti, Susanna Tomasoni, Cristina Zanchi, Lorena Longaretti, Roberta Donadelli, and Giuseppe Remuzzi*
  - 2195 Replication and Clearance of Respiratory Syncytial Virus: Apoptosis Is an Important Pathway of Virus Clearance after Experimental Infection with Bovine Respiratory Syncytial Virus  
*Birgitte Viuff, Kirsten Tjørnehoj, Lars E. Larsen, Christine M. Røntved, Ase Utentbal, Lef Rensbøl, and Søren Alexandersen*
  - 2209 Serotonin Mechanisms in Heart Valve Disease II: The 5-HT<sub>2</sub> Receptor and Its Signaling Pathway in Aortic Valve Interstitial Cells  
*Jie Xu, Bo Jian, Richard Chu, Zhibin Lu, Quanyi Li, John Dunlop, Sharon Rosenzweig-Lipson, Paul McGonigle, Robert J. Levy, and Bruce Liang*
  - 2219 CD44 Deficiency Leads to Enhanced Neutrophil Migration and Lung Injury in *Escherichia coli* Pneumonia in Mice  
*Qin Wang, Priti Teder, Nancy P. Judd, Paul W. Noble, and Claire M. Doerschuk*
  - 2229 Constitutive Nuclear Factor- $\kappa$ B Activity Is Crucial for Human Retinoblastoma Cell Viability  
*Vassiliki Poulaki, Constantine S. Mitsides, Antonia M. Jousen, Alexandra Lappas, Bernd Kirchhof, and Nicholas Mitsides*
  - 2241 Acceleration of Mouse Mammary Tumor Virus-Induced Murine Mammary Tumorigenesis by a p53<sup>172H</sup> Transgene: Influence of FVB Background on Tumor Latency and Identification of Novel Sites of Proviral Insertion  
*Gouri Chatterjee, Andrea Rosner, Yi Han, Edward T. Zelazny, Baolin Li, Robert D. Cardiff, and Archibald S. Perkins*
  - 2255 Insulin-Regulated Increase of Soluble Vascular Adhesion Protein-1 in Diabetes  
*Marko Salmi, Craig Stolen, Pekka Jousilampi, Gennady G. Yegutkin, Päivi Tapanainen, Tuula Janatuinen, Mikael Knip, Sirpa Jalakanen, and Veikko Salomaa*
  - 2263 Improved Contractile Function of the *mdx* Dystrophic Mouse Diaphragm Muscle after Insulin-Like Growth Factor-I Administration  
*Paul Gregorevic, David R. Plant, Kerri S. Leeding, Leon A. Bach, and Gordon S. Lynch*
- Animal Models**
- 2273 Induction of Colitis in Mice Deficient of Peyer's Patches and Mesenteric Lymph Nodes Is Associated with Increased Disease Severity and Formation of Colonic Lymphoid Patches  
*Thomas W. Spahn, Hermann Herbst, Paul D. Rennert, Norbert Lügering, Christian Maaser, Mathias Kraft, Adriano Fontana, Howard L. Weiner, Wolfram Domschke, and Torsten Kucharzik*
  - 2283 Shock-Induced Neutrophil Mediated Priming for Acute Lung Injury in Mice: Divergent Effects of TLR-4 and TLR-4/FasL Deficiency  
*Alfred Ayala, Chun-Sbiang Chung, Joanne L. Lomas, Grace Y. Song, Lesley A. Doughty, Stephen H. Gregory, William G. Cioffi, Brian W. LeBlanc, Jonathan Reichner, H. Hank Simms, and Patricia S. Grutkoski*
  - 2295 Generation of a Syngeneic Mouse Model to Study the Effects of Vascular Endothelial Growth Factor in Ovarian Carcinoma  
*Lin Zhang, Nuo Yang, Jose-Ramon Conejo Garcia, Alisba Mohamed, Fabian Benencia, Stephen C. Rubin, David Allman, and George Coukos*